# COMPUTER HEALTH DOCUMENTATION

## Major No-No's While Using a Computer

- 1. Never use a computer during a thunder and lightning storm. When you first hear the thunder or see a lightning flash during a storm, do the following:
  - a. Shut down your computer and its related hardware.
  - b. Disconnect the surge protector from the wall.
  - c. Disconnect modem connections at or from the wall. (the phone line or cable input to the modem)

Surge-protected, power strips and Uninterruptible Power Supplies (UPS's) cannot be considered enough protection from the electrical effects of a lightning storm if they stay plugged in. It's cheap insurance isolating the computer system completely from its outside connections before the storm hits.

- 2. Never plug or unplug the keyboard or mouse while the computer is on. While running, the computer continually electronically strobes these devices for input. (Always shut the computer down first.)
- 3. Never delete program <u>applications</u> using Windows Explorer after they have been installed. Removing an old program application should be done with the "Add/Remove Programs" utility of the control panel. Select: Start | Settings | Control Panel | Add/Remove Programs, find the program you wish to delete and follow the directions.
- 4. Don't change or delete the files in the C:\Windows\System folder because Windows needs all its helper files of this folder to run properly. (Only delete files you're sure you want to send to the recycle bin.)
- 5. Skip emptying the recycle bin until you've successfully rebooted the computer on a couple of occasions after deleting a file. If the computer then has problems running without the file you've deleted, restoring the file from the recycle is an easy process provided you haven't cleared the bin.
- 6. Don't open e-mail attachments or use some else's floppy disk or zip disk unless you're certain the disk is virus-free. (Scan it first--see the section below on anti-virus software.)
- 7. Don't drop a notebook (laptop) computer because this usually results in a fractured video screen that costs approximately \$900 to replace—though the newer notebook computers are better shock-resistant.
- 8. Keep non-computer stuff such as food, drinks, tobacco ash and smoke away from your computer since all are problems if they come in contact with it.
- Don't put cable modem or router units on top of a computer tower. Each
  adds heat to the tower which burdens what the computer's power supply
  fan must cool. Computer power supplies have been known to overheat and
  fail in this way.
- 10. Beware of what you get with downloaded programs that are free. Free file-sharing programs for downloading music and games usually come with a heavy extra cost--adware and malware/spyware programs that come along with the download. They may either target you with lots of unwanted advertising, they may destabilize your computer, or at worst they may steal

your private information. Malware may take over your computer by running a variety of downloaded trojan programs without your permission! These trojan programs may use your computer as a robot to attack other computers via the Internet.

## Yes-Yes Habits While Using a Computer

Good computer-related, working habits helps to insure that your computer will work when it must.

- 11. Close down applications you don't need for the moment.
- 12. Try not to open too many applications or files at once. In theory, Windows should be able to handle them, but jumping back and forth between numerous applications or files tends to make Windows more unstable.
- 13. Save your work files frequently as you work on them, but use long file names sparingly. Long file names are legal with Windows, but if your machine needs to be diagnosed at the DOS level, they can't be viewed by DOS. The 8.3 DOS format such as "Mary0814.doc" is also easier to locate with Windows Explorer and is less problematic when encountered by "Scandisk".
- 14. Make back-ups of your critical files often enough so you don't lose your important work. For really important files, back them up to pocket CD-R's, floppy, memory keys or zip disks. (My current preferences are the memory key and CD-R.) Files can also be saved on compact-flash and smart media cards that many cameras use! (The cameras can't use non-camera files, but your computer can.)
- 15. If your computer "loses" the printer or scanner, assume that Windows has "lost" some other active utilities as well. Power down and then restart the computer.
- 16. Run the "Scandisk" utility (see below) after intensive use on the computer with many or large files.
- 17. Defragment your hard drive about once per month.
- 18. Double-click on the posted time on your computer to reset your date and time if they're wrong. (Dates are appended to files when saved.) Visit the utility "Regional Settings" by selecting: Start | Settings | Control Panel | Regional Settings to fix the time zone information so that the reference from Greenwich Mean Time on your e-mail letters is correct (such as -0500 to indicate 5 hours earlier than GMT).
- 19. Use a medium-quality, surge-protector for your computer's power plugs and phone/cable line. Electrical and phone lines have considerable noise, power dips and surges which degrade modems, power supplies and motherboards over time. If a power brown-out or black-out occurs, unplug the computer and other electronically-sensitive equipment--to avoid unstable power after the outage. Remember that your house's appliances such as refrigerators, freezers, pumps, furnace, AC, etc. will make high demands when they restart together.
- 20. While some equipment can be "hot-swapped", it's a better idea to power down your computer before disconnecting or connecting any wiring to a computer. Disconnecting or connecting "live" equipment always causes a spark.
- 21. Before you leave for an extended vacation, power down the computer and disconnect plugs and phone/cable modem lines.

- 22. Make a set of emergency start-up disks. Have on-hand a few new floppy disks, then visit: Start | Settings | Control Panel | Add/Remove Programs then select the "Startup Disk" tab and follow directions.
- 23. Limit the number of recipients in the "To:" portion of your out-going e-mail's so you won't be accused of spamming by you ISP. Use the BCC for groups of e-mail recipients.
- 24. Get the critical windows updates from the Microsoft to keep your computer sturdy against Internet troubles.

#### "ScanDisk" - A Good Utility to Use if Windows or a Program Fails

Start | Programs | Accessories | System Tools | ScanDisk Choose "Standard", check the box to "Automatically Fix Errors" and then start the run of the program.

ScanDisk for Windows is a Microsoft utility which checks to see if the filing system on the disk is correctly configured. It checks for cross-linked files, files left open, etc.

Run this program every few weeks and particularly if your computer has had an improper shut-down or crash of some sort. Run this program after you have installed or uninstalled a program.

Choose the option "Thorough" if you continue to have what seem to be disk storage errors. (Files don't save properly or applications that lock up and won't respond.) Run the "Thorough" configuration about once every two months.

For Windows XP, the new ScanDisk utility doesn't need to be run as often and requires a restart of the computer to run in a non-Windows mode.

# "Disk Defragmenter" - A Good Utility to Use Monthly to Improve Performance

Start | Programs | Accessories | System Tools | Disk Defragmenter Choose Drive C and start the run of the program. (Also run the program for other drive letters of the hard disk.) If you have trouble running the defragmenter utility, turn off the screen saver, then restart the computer, first watching for the company screen before Windows begins to load and then immediately and repeatedly toggling the F8 key. When the black and white screen loads, use the arrow keys to select "Safe Mode", then press "Enter". Safe Mode is a limited version of Windows with no other files loaded at start-up. Disk Defragmenter should run okay there without the extra start-up files bothering it. When done, restart the computer to return to the regular Windows screen, and then reactivate the screen saver if you use one.

Disk Defragmenter for Windows is a Microsoft utility which reorganizes the files of the disk so that files have all of their parts in close proximity and so that open free space of the disk is all together. Over time, disk space fragments because most programs grab free space in ungrouped hunks of storage as they run. For example, "Undo" commands on programs require huge swap files while the program runs. When a program closes or exits, parts of files tend to remain scattered about the disk and are left that way. Typically, fragmented drives require more time for applications to load and run. Users typically report that their computers take longer than they used to when running familiar applications.

Run Disk Defragmenter if you use many different files and your machine has had weeks of heavy activity. Recently installed or uninstalled programs leave a lot of temporary files on the disk and fragment the drives also.

Final note: if your DiskDefragmenter indicates even 0% fragmented, the percentage is probably not correct. Drives that are more than 10% fragmented take a long while to defragment.

## Unfreezing a Computer Mouse

Over a period of use, the mouse ball inside the computer's mouse draws in dirt from the mouse pad and tends to cause the mouse to stick or freeze. Fixing the problem is usually fairly easy.

- 25. Shut the computer down.
- 26. Turn the mouse up-side-down and rotate the holder ring.
- 27. Remove the mouse ball and wash in soapy water, rinse and dry.
- 28. Use tweezers to remove tangled debris on the two rollers of the mouse compartment that the mouse ball touches. You may need to scratch the rollers clean with a fingernail or with a light alcohol swab on a cute tip, though keep alcohol away from the ball. Let the alcohol dry. Blowing inside the mouse cavity or rapping it lightly on the mouse pad may remove some other dirt.
- 29. Replace the mouse ball and the holder ring-rotating the holder ring in the opposite direction.
- 30. Clean the mouse pad by picking it up and slapping or vacuum the pad.
- 31. Power up the computer and try your "revived" mouse.

If the mouse can't be "revived", it's easy and inexpensive to replace by visiting an office supply store. Some of the newer computer mice may have a better "hand feel" and have a number of new features that make them easier to use.

# Keeping Your Computer Virus-Free

Year 2002 has become the year of the computer viruses. Just one virus infection in your computer may turn your hard drive into an expensive paper weight thus making your computer unusable!

- 32. Back up all important files using either floppy disks, zip disks or CD-R/W ROM'S.
- 33. Have an anti-virus program installed on your computer and update it regularly (once every week). Businesses which use e-mail that regularly contain attachments should update their anti-virus tools daily!
- 34. Only open e-mail attachments from people you know and trust. When in doubt write the person you know to describe the attachment more fully and

ask them if they meant to send you the attachment. Don't open attachments from strangers--EVER! Attachments with the extensions .BAT, .PIF, .EXE, .COM, .SCR and .VBS are executable programs that may contain viruses. Attachments with double extensions such as .TXT.PIF are probably viruses. If an e-mail or attachment looks suspicious, don't mess with it!

- 35. Save attachments to a disk before opening. Do not open the attachment directly from the e-mail program. Save it first to a disk, preferably a removable disk, and then scan the disk with an anti-virus program.
- 36. When in a drive, use your anti-virus software to first scan any floppy disks, zip disks, etc. that someone gave you--before loading or executing any applications they contain.
- 37. If you use Microsoft Office program versions 97 or later, be sure that you have "Macro Virus Protection" <u>enabled</u> which is found under the Option dialogue under the Tools menu.
- 38. If you insist on using Microsoft Outlook or Microsoft Outlook Express as your e-mail program, be sure that you have the latest updates from <a href="http://www.officeupdate.com">http://www.officeupdate.com</a>. Also be sure to set the environment in these programs to disable the preview-attachment feature. These programs are usually set to preview attachments (thus opening them) by default. Since many viruses target these e-mail programs, I suggest instead that you use a free web-based e-mail client such as <a href="Yahoo Mail">Yahoo Mail</a> or <a href="Hotmail">Hotmail</a> to read and send e-mail. Each of these makes use of free anti-virus software that you can use to check your attachments--before opening them of course.
- 39. Suppose you don't have an anti-virus tool in your computer and you have an immediate need to scan your computer. A visit to the anti-virus company <a href="Trend Micro">Trend Micro</a>, <a href="Panda Software">Panda Software</a> or <a href="Symantec">Symantec</a> may be able to help you with their on-line program that you can download and use for free. The better solution would be to use either their regular anti-virus tool or one from another vendor.
- 40. Last, especially if you maintain a network connected to the Internet, you would be advised to obtain a firewall product such as <u>Zone Alarm</u>. A firewall program acts as a gatekeeper utility that watches what enters or leaves your computer(s). It can do a good job of filtering out a host of problems that come with using the Internet.

# Websites to Help You Maintain Your Computer

<u>Symantec Corp.</u> and <u>McAfee.com Corp.</u> are in my opinion the leading help support corporations for the regular computer user. Both have many options for keeping your computer healthy. More anti-virus companies of note are: (no particular order)

Trend Micro at http://trendmicro.com

Central Command at <a href="http://CentralCommand.com">http://CentralCommand.com</a>

Kaspersky at http://Kaspersky.com

Norman at <a href="http://Norman.com">http://Norman.com</a>
Sophos at <a href="http://Sophos.com">http://Sophos.com</a>

Message Labs at http://messagelabs.com

F-Secure at http://f-secure.com

Panda Software at <a href="http://www.pandasoftware.com">http://www.pandasoftware.com</a>

Some of these have on-line anti-virus scans such as Trend Micro's "House Call".

# Norton AntiVirus 2004© (Symantec Corp.) or VirusScan © (McAfee.com Corp.)

Use an anti-virus program on your computer. About every week the updated virus list should be downloaded to your computer to keep it current with the viruses that permeate the Internet.

Note: don't put two different anti-virus programs in your computer as they compete for resources and sometimes collide.

#### Norton System Works 2004 © (Symantec Corp.)

Included in this package is a disk doctor and a windows doctor to diagnose and correct errors on your computer. This package will solve many of the minor problems that the busy windows environment presents.

#### Uninstaller © (McAfee.com Corp.)

I feel that this program is stronger and more successful in uninstalling programs and files than does the "Add/Remove Programs" utility on the computer's control panel. This program also gives excellent dialog and advice as you use its features.

Information taken from http://madmod.com/clinic.html